

Bureau of Materials and Physical Research

Illinois Modified ASTM C 1107/C 1107M-11

Effective Date: January 1, 2007

Revised Date: [September 07, 2012](#)

Standard Method of Test
for
Packaged Dry, Hydraulic-Cement Grout (Nonshrink)

**Modifications apply only when testing material according to Article 1024.01 of the
Standard Specifications for Road and Bridge Construction (January 1, 2012).**

ASTM Section	Illinois Modification
Table 1	Add the following requirements: Initial Set according to C 953, min 60.0 minutes Relative Dynamic Modulus of Elasticity, min 80 percent
6.1	Replace as follows: Specimens shall be made from freshly mixed "flowable" grout as defined under 3. Terminology and shall meet the requirements prescribed in Table 1, except for the following: <ul style="list-style-type: none">• 1-day Compressive Strength, minimum, shall be 3000 psi (20.7 MPa)• 3-day Compressive Strength requirements shall not apply• 7-day Compressive Strength , minimum, shall be 6000 psi (41.4 MPa)• 28-day Compressive Strength , minimum, shall be 8000 psi (55.2 MPa)
6.2, 6.3, and 6.4	Delete these sections.
7	Replace as follows: Empty 3 to 5 packages of nonshrink grout into mixer and dry mix for approximately 90 seconds or until there are no clumps in the material and the material appears to be well mixed. Use this material for testing.
8	Delete all sections except for 8.1.2.
9.1	Replace as follows: The amount of water recommended by the manufacturer on the package to achieve a mixture of "flowable" consistency as defined under 3. Terminology shall be used to determine conformance with the requirements of this specification.
10	Replace as follows: Mix the material in a mortar-mixing apparatus as specified in Practice C 305, according to the following procedure: <ul style="list-style-type: none">• Mix dry material for 30 seconds• Add the entire volume of water within 5 seconds• Mix for 25 seconds• Stop mixer, scrape bowl sides for 15 seconds• Mix for an additional 2 minutes and 45 seconds• Measure flow according to ASTM C 827
11.3	Add as follows: Note (Internal Department Use): Bureau of Materials and Physical Research does not perform this test.
11.4.2	Add as follows: Note (Internal Department Use): Bureau of Materials and Physical Research does not perform this test.

Bureau of Materials and Physical Research
Illinois Modified ASTM C 1107/C 1107M-08
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Standard Method of Test
for
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Standard Specifications for Road and Bridge Construction (January 1, 2012).

ASTM Section	Illinois Modification
11.5.2	Replace as follows: Place a rigid, nonreactive cover plate over the cube mold. Use paraffin to seal the edges of the cover plate to the mold. The plate shall overlap the cube mold a minimum ¼ in. (6 mm). Place a minimum 5.0 lb. weight (2.2 kg mass) on the surface of the cover plate. Immediately place test specimens in the moist room.
11.6 New Section	<i>Resistance to Freezing and Thawing</i> —Test specimens shall consist of prisms made, cured, and tested according to Illinois Modified AASHTO T 161, entitled Resistance of Nonshrink Grout to Rapid Freezing and Thawing, Procedure B.